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☐ 1: A46368. erythrocyte membr...[gi:423065]

BLink, Domains, Links

LOCUS A46368 417 aa linear PRI 15-JUN-2001
 DEFINITION erythrocyte membrane protein RhD - human.
 ACCESSION A46368
 VERSION A46368 GI:423065
 DBSOURCE pir: locus A46368;

summary: #length 417 #molecular-weight 45162 #checksum 7429
 ;
 genetic: #gene GDB:RHD; RH; RhD ##cross-references GDB:119551;
 OMIM:111680 #map_position 1p36.2-1p34
 ;
 superfamily: human erythrocyte membrane protein RhD
 ;
 PIR dates: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change
 15-Jun-2001

KEYWORDS erythrocyte; surface antigen; transmembrane protein.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (residues 1 to 417)
 AUTHORS Saboori,A.M., Smith,B.L. and Agre,P.
 TITLE Polymorphism in the Mr 32,000 Rh protein purified from
 Rh(D)-positive and -negative erythrocytes
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 85 (11), 4042-4045 (1988)
 MEDLINE 88234555

REFERENCE 2 (residues 1 to 417)
 AUTHORS Bloy,C., Blanchard,D., Dahr,W., Beyreuther,K., Salmon,C. and
 Cartron,J.P.
 TITLE Determination of the N-terminal sequence of human red cell Rh(D)
 polypeptide and demonstration that the Rh(D), (c), and (E) antigens
 are carried by distinct polypeptide chains
 JOURNAL Blood 72 (2), 661-666 (1988)
 MEDLINE 88294325

REFERENCE 3 (residues 1 to 417)
 AUTHORS Avent,N.D., Ridgwell,K., Mawby,W.J., Tanner,M.J., Anstee,D.J. and
 Kumpel,B.
 TITLE Protein-sequence studies on Rh-related polypeptides suggest the
 presence of at least two groups of proteins which associate in the
 human red-cell membrane
 JOURNAL Biochem. J. 256 (3), 1043-1046 (1988)
 MEDLINE 89134163

REFERENCE 4 (residues 1 to 417)
 AUTHORS Suyama,K., Goldstein,J., Aebersold,R. and Kent,S.
 TITLE Regarding the size of Rh proteins
 JOURNAL Blood 77 (2), 411 (1991)

EXHIBIT 1

MEDLINE 91091537
REFERENCE 5 (residues 1 to 417)
AUTHORS Le Van Kim,C., Cherif-Zahar,B., Raynal,V., Mouro,I., Lopez,M., Cartron,J.P. and Colin,Y.
TITLE Multiple Rh messenger RNA isoforms are produced by alternative splicing
JOURNAL Blood 80 (4), 1074-1078 (1992)
MEDLINE 92360855
REFERENCE 6 (residues 1 to 417)
AUTHORS Le van Kim,C., Mouro,I., Cherif-Zahar,B., Raynal,V., Cherrier,C., Cartron,J.P. and Colin,Y.
TITLE Molecular cloning and primary structure of the human blood group RhD polypeptide
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (22), 10925-10929 (1992)
MEDLINE 93066356
REFERENCE 7 (residues 1 to 417)
AUTHORS Arce,M.A., Thompson,E.S., Wagner,S., Coyne,K.E., Ferdman,B.A. and Lublin,D.M.
TITLE Molecular cloning of RhD cDNA derived from a gene present in RhD-positive, but not RhD-negative individuals
JOURNAL Blood 82 (2), 651-655 (1993)
MEDLINE 93320449
REFERENCE 8 (residues 1 to 417)
AUTHORS Westhoff,C.M. and Wylie,D.E.
TITLE Identification of a new RhD-specific mRNA from K562 cells
JOURNAL Blood 83 (10), 3098-3100 (1994)
MEDLINE 94235883
REFERENCE 9 (residues 1 to 417)
AUTHORS Suyama,K., Lunn,R., Haller,S. and Goldstein,J.
TITLE Rh(D) antigen expression and isolation of a new Rh(D) cDNA isoform in human erythroleukemic K562 cells
JOURNAL Blood 84 (6), 1975-1981 (1994)
MEDLINE 94362249
FEATURES Location/Qualifiers
source 1..417
/organism="Homo sapiens"
/db_xref="taxon:9606"
Protein 1..417
/product="erythrocyte membrane protein RhD"
/note="blood group antigen Rh(D)"

ORIGIN

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1 msskyprsvr rclplwaltl eaalillfyf fthydasled qkglvasyqv gqdlvtmaai
61 glgfltssfr rhswssvafn lfmlalgvqw ailldgflsq fpsgkvvitl fsirlatmsa
121 lsvlisvdav lgkvnlaqlv vmvlvevtal gnrmvisni fntdyhmnmnm hiyvfaayfg
181 lsvawclpkp lpegtdkdq tatipslsam lgalfwifw psfnsallrs pierknvfn
241 tyyavavsvv taisgsslah pggkisktyv hsavlaggva vgtschlips pwlamvlgv
301 aglisvggak ylpgccnrvl giphssimgy nfsllgllge iiyivllvld tvgagngmig
361 fqvllsigel slaivialts glitglllnl kiwkapheak yfddqvfwkf phlavgf

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Revised: July 5, 2002.

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EXHIBIT 1